

CLAIMS

What is Claimed is:

1. A system that facilitates updating of firmware in an electronic device, wherein the system supports lifecycle management of firmware updating information, the system comprising:

an electronic device comprising:

firmware;

loading software that retrieves updating information for the firmware; and

updating software that applies the retrieved updating information to the firmware in the electronic device.

2. The system according to claim 1 wherein the system further comprises a network that distributes the updating information to the electronic device, the network comprising:

updating storage that stores updating information to be distributed to the electronic device; and

at least one server that retrieves the updating information from the updating storage.

3. The system according to claim 2 wherein the at least one server distributes the retrieved updating information to the electronic device.

4. The system according to claim 2 wherein the at least one server further supports management of the lifecycle of the updating information.

5. The system according to claim 4 wherein the at least one server further supports management of the lifecycle of the electronic device.

6. The system according to claim 2 wherein the electronic device sends requests for updating information.

7. The system according to claim 6 wherein the requests comprise information about the electronic device.

8. The system according to claim 6 wherein the at least one server receives and processes the requests, and retrieves appropriate updating information from the updating storage based on the requests.

9. The system according to claim 2 wherein the network further comprises:
a first structure that manages the lifecycle of the electronic device; and
a second structure that manages the lifecycle of the updating information associated with the electronic device.

10. The system according to claim 9 wherein the first structure performs at least one of:

tracking changes of firmware versions in the electronic device;
providing information about available firmware updates to the electronic device; and
interacting with the at least one server to provide information about firmware updates.

11. The system according to claim 9 wherein the second structure performs at least one of:

supporting import updating information from an updating information file containing updating information for different version changes of firmware; and
verifying the authenticity of firmware updating information.

12. A method for updating firmware in an electronic device of a system, wherein the system comprises the electronic device and a network, the method comprising:

generating updating information in a generation environment;
saving the generated updating information in a storage;
communicating the saved updating information to a distribution environment; and
managing the lifecycle of the updating information.

13. The method according to claim 12 wherein the method further comprises packaging the saved updating information before communicating it to the distribution environment.

14. The method according to claim 12 wherein the distribution environment comprises an updating storage and a server.

15. The method according to claim 12 wherein the method further comprises:
receiving requests for updating information;
facilitating downloads of the requested updating information;
verifying reception of the downloaded updating information; and
utilizing the downloaded updating information to update firmware in the electronic device.

16. A system that facilitates updating of at least one of firmware and software in electronic devices, wherein the system supports lifecycle management of firmware updating information, the system comprising:

a network that distributes the updating information to electronic devices, the network having a lifecycle management component that manages the lifecycle of the updating information.

17. The system according to claim 16 wherein the network further comprises a management console employed for lifecycle management of the updating information.

18. The system according to claim 16 wherein lifecycle management comprises at least one of:

facilitating loading of the updating information;
facilitating deleting of the updating information; and
facilitating editing of status information of the updating information.

19. The system according to claim 16 wherein the network further comprises a lifecycle management component that manages the lifecycle of the electronic devices.

20. The system according to claim 19 wherein the network further comprises a management console employed for lifecycle management of the electronic devices.

21. The system according to claim 19 wherein lifecycle management of the electronic devices comprises at least one of:

- provisioning of the electronic devices;
- determining change of ownership of the electronic devices;
- determining change of subscription of the electronic devices; and
- determining when an electronic device is no longer in use in the system.

22. The system according to claim 16 wherein the electronic devices maintain statistics information regarding the total number of distributed updating information and the time of distribution of the updating information and communicate the statistics information to a server.

23. The system according to claim 22 wherein the lifecycle management component records the total number of distributed updating information and the time of distribution of the updating information for each distributed updating information to the electronic devices.

24. A configurable lifecycle management system for updating information that updates at least one of firmware and software in electronic devices, wherein the configurable lifecycle management system is capable of changing the state of updating information stored in a network that communicates updating information to the electronic devices.

25. The configurable lifecycle management system according to claim 24 wherein only an administrator is capable of changing the state of the stored updating information and specifying a time for the change of the state of the stored updating information to occur.